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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,693	05/24/2004	RYAN THOMAS BECHARD		3692
37054	7590	08/30/2005		
RYAN T. BECHARD 6539 50TH AVE. CHIPPEWA FALLS, WI 54729			EXAMINER COCKS, JOSIAH C	
			ART UNIT 3749	PAPER NUMBER

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

**Office Action Summary**

Application No.

10/709,693

Applicant(s)

BECHARD, RYAN THOMAS

Examiner

Josiah Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-6,9,10,12-16,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,9,10,12-16,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt of applicant's amendment filed 6/20/2005 is acknowledged.
2. Applicant indicates that claims 3, 7, 8, 11, 17, and 18 have been "discontinued" and has marked these claims in the claim listing with the modifier "withdrawn." Withdrawn is not an appropriate modifier in this context, as no restriction or election requirement has been made by the examiner. It appears that applicant does not intend these claims to be pending in the application. The appropriate modifier in that case is "canceled." The application has been examined on the basis that these claims 3, 7, 8, 11, 17, and 18 have been canceled, however, in any response to this Office action is necessary for applicant to designate these claims as "canceled."

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 7, 9, 12, 15, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,976,918 to Leach ("Leach").

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Leach discloses in Figures 1 and 2 the invention as described in applicant's claims 1, 4, 7, 9, 12, 15, 19, and 20. In particular, Leach shows a device (10) for preheating heavy oil in a oil burning system and method of preheating the oil that includes a body (12) made of thermally conductive material and includes an oil passageway (34, 39) and a liquid passageway (interior of housing 12) in which, heated in tank (67) is supplied via line (66). Oil passing through the oil passageways is heated in order to prevent the oil from becoming too thick to properly flow to the combustion assembly (see col. 1, lines 18-47). The water is circulated by pump (70) and the oil circulated by pump (54). The examiner considers that the body (12) is of sufficient shape and length to properly operate in various applications.

In regard to the recitation in the preamble of the independent claims that the preheating device is "for a multi oil burner," this recitation is simply a statement of the intended use of the preheating device. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Further, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claims does not depend on the preamble for completeness but, instead, the process steps of structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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In this case, the examiner considers that the heavy oil disclosed in Leech is not limited to a specific type of variety of heavy oil and is thus considered to be a burner capable of operating on a variety of heavy fuel oils. The examiner considers that this type of burner would therefore properly be considered a "multi oil burner." However, even if the heavy oil burner of Leach is not considered to be a "multi oil burner," the pre-heating device disclosed is capable of pre-heating heavy oil for such a burner and therefore meets applicant's claims.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5, 6, 10, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leach as applied to claims 1 and 9 above in view of U.S. Patent No. 4,797,089 to Schubach et al. ("Schubach").

Leach does not go into further detail as to how the oil is supplied in the combustion apparatus, i.e. via an air atomizing nozzle and thus the presence of an air passageway in the body.

Schubach teaches an oil preheating device in the same field of endeavor as the oil pre-heating device of Leach. As is well understood in the art, such devices include a body having the form described by applicant including an oil atomizing nozzle (26) that is atomized by a flow of

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air supplied via an air inlet (18) to an air passageway in a body of the device (see Fig. 3). The device further includes an ignition device (39) mounted to ignite the flow from the nozzle.

However, in Schubach, the oil preheating means is an attached adjacent heating element (12).

Therefore, in regard to claims 2, 5, 6, 10, 13, 14, and 16 it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the means for causing oil preheating via an additional pre-heated liquid of Leach in the oil preheating device of Schubach as the preheating means of Leach is recognized as an improvement over the attached adjacent heating element of Schubach. Leach specifically notes that an adjacent electrical or gas heating unit (such as that of Schubach) has a possible disadvantage of not being able to heat the oil uniformly (see Leach, col. 1, lines 27-35). The heated liquid/water passageway structure of represents an improved oil preheating system that is simple in construction and efficient in operation (see Leach, col. 1, lines 43-47).

### *Response to Arguments*

7. Applicant's arguments filed 6/20/2005 have been fully considered but they are not persuasive. As noted above, the recitation in the preamble of the independent claims of "for a multi oil burner" does not distinguish applicant's invention. Further, even if the burner of Leach is not properly considered a "multi oil burner," applicant's claims are not drawn to the combination of a pre-heating device and multi oil burner, as the recitation of multi fuel burner is simply a statement of intended use.

Applicant also appears to argue that the Leach would somehow be incapable of operating at temperatures necessary to heat waste oil, and specifically any waste oil that is near the burner

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nozzle (page 6 applicant's response). The examiner does not agree. Leach recognizes that heavy oil, when cold, is thick and does not readily flow (see Leach, col. 1, lines 21-23). The very purpose of the pre-heater of Leach is to specifically oil to a constant temperature so that oil will flow from its source to a burner. To this end Leach clearly states,

“[a]nother object of this invention, is to provide a substantially automatic preheater system for fuel oil fired furnaces that is operative to supply fuel oil to the burners at a substantially constant temperature regardless of ambient temperature conditions.”(see Leach, col. 1, lines 47-52).

Applicant's argument that Leach mentions nothing about pre-heating oil for combustion at or in a burner (see response p. 7) is contrary to the plain disclosure of Leach.

Applicant also argues that Leach and Schubach are non-analogous art. However, the examiner notes that both of these patents are drawn to pre-heating devices for burner systems using, as a fuel, types of oil. Further, as one would expect, given the similarity of the subject matter of these two patents, both find their classification in class 431 as relating to combustion systems. This patents are properly considered analogous art.

Applicant further argues that there is no motivation to combine Leach and Schubach and that the two reference would be incapable of being combined. In response, the examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). As clearly pointed by the examiner, both in the prior Office action and again above, Leach explicitly notes that an adjacent gas fired heating device (such as that of Shubach) has a possible disadvantage of not being able to heat the oil

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uniformly (see Leach, col. 1, lines 27-35) and proposes a pre-heating assembly to remedy this deficiency. Accordingly, the teachings of these two reference would suggest to a person of ordinary skill in the art to combine the oil preheating assembly of Leach with the oil burning device of Shubach, which includes the nozzle and passageway structure of applicant's claims, to obtain applicant's claims invention.

### *Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.




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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter, can be reached at (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

jcc  
August 23, 2005

  
JOSIAH COCKS  
PRIMARY EXAMINER  
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